REMARKS

This is intended as a full and complete response to the Office Action dated March 14, 2003, having a shortened statutory period for response set to expire on June 14, 2003. claims 1, 7, 8, 13, 20, 27, and 29 have been amended in this response. Claim 25 has been cancelled. New claims 30, 31, 32 and 33 have been added.

Claim rejections - 35 USC § 112

Claims 25 and 29/(1-26) are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 25, Applicant has cancelled the claim. The Applicant has also amended claim 29 and would also point the Examiner's attention to Figures 4 and 4a and page 8, lines 6-35. Accordingly, the claims have been amended to comply with the Examiner's objections.

Claim Rejections - 35 USC § 102

Claims 1-6, 8-19, 21-24 and 26 are rejected under 35 USC 102(b) as being unpatentable by United States Patent No. 3,846,795 to *Jones*.

The Examiner states that *Jones* discloses a device for detecting the presence of a chemical contaminant, the device comprising an indicator element (26) which is held in a first position by means of a failure element (3) which is held in tension, the failure element being made of a material which fails in the presence of the chemical contaminant, thereby releasing the indicator element from its first position and allowing it to move into second position in order to provide an indication of the presence of the contaminant; the indicator element is held in the first position by a biasing force, the biasing force acting to move the indicator element to the second position upon failure of the failure element; the biasing force is provided by the resilience of the indicator element; the resilient indicator element is a spring which is fixed to the failure element, the spring being under compression, such that the failure element is under tension; failure element is a tubular member; the tubular member is seal d, the inside of the tubular member is maintained at a pressure other than atmospheric, and means (42)

are provided to monitor this pressure to determine the integrity of the tubular member; the failure element is made of a material which changes its appearance in the presence of the contaminant (column 5, lines 7-14); the indicator element is held in the first position by a biasing force and wherein a further force, which is strong enough to override the biasing force is arrange to act on the indicator element to move it to the second position upon failure of the failure element; the failure element is a tubular element and the indicator element is within the tubular element and is fixed at one end to the failure element, while its other end projects beyond the other end of the failure element and is biased away from the other end of the failure element; the failure element and indicator element are arranged to be supported vertically, wherein the further force is gravity (see Figure 1); the failure element comprises a number of different materials (column 6, lines 67-68) arranged in series and/or in parallel. The Applicant respectfully traverses the rejection.

Jones discloses an apparatus for providing an early warning of impending failure of a system structural element subject to corrosion. The apparatus provides a housing containing a corrodible member coupled to the structure so as to expose the corrodible member to the corrosive environment as in the system. (See Figure 1- 3, abstract and Col. 3, lines 23 – 64). *Jones* does not teach, show or suggest a device for detecting the presence of a chemical leak, the device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak as recited in independent claim 1 and any claims that depend therefrom. In addition, *Jones* does not teach, show or suggest a device for detecting the presence of a chemical leak, the device comprising a resilient indicator element which is held in a first position and is anchored in the first position by means of a failure element, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the chemical leak; wherein the failure element is longer in the direction in which the indicator element moves on failur of the failure

element than it is in any oth r dimension as recited in independent claim 13 and any claims that depend therefrom. Therefore, Applicants believe that claims 1 and 13 and any claims depending therefrom are in condition for allowance and respectfully request allowance of the same.

Claims rejections - 35 USC § 103

Claims 7 and 20 are rejected under 35 USC 103(a) as being unpatentable over *Jones* in view of European Patent Application No. 0 370 685 to *Beard et al.* [hereafter *Beard*].

The Examiner states that *Jones* describes the device as described in paragraph 5 of the Office Action rejection but does not disclose the spring being attached to the failure element by a respective starlock washer at the end of the spring, each washer being anchored to the failure element so as to be capable of movement in only one direction along the failure element. The Examiner then states that *Beard* discloses a starlock washer (40) attached at the end of a spring (42) so that the spring is capable of movement in only one direction. The use of a particular type of constraint claimed by the applicant, is considered to be nothing more than a choice of engineering skill, choice, or design because since both are well known alternate types of constraints which will perform the same function, if one is replaced with the other, it is considered to be nothing more than the use of one of numerous and well known alternate types of constraints that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to hold the spring in place, as already suggested by *Beard*. The Applicant respectfully traverses this rejection.

Jones, as discussed above, does not teach, show or suggest a device for detecting the presence of a chemical leak, the device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the chemical leak as recited in independent claim 1 and any claims that depend therefrom. In addition, *Jones*, as discussed above, does not teach show or suggest a device for detecting the presence

of a chemical leak, the device comprising a resilient indicator element which is held in a first position and is anchored in the first p sition by means of a failure element, the failure element being made of a material which fails in the event of a leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the chemical leak; wherein the failure element is longer in the direction in which the indicator element moves on failure of the failure element than it is in any other dimension as recited in independent claim 13 and any claims that depend therefrom. *Beard* discloses an adjuster for Bowden cable. The cable is used in a vehicle clutch operation. The references, neither alone nor in combination, teach, show or suggest a device for detecting the presence of a chemical leak, the device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak as recited in independent claim 1 and any claims that depend therefrom. In addition, the references, neither alone nor in combination, teach, show or suggest a device for detecting the presence of a chemical leak, the device comprising a resilient indicator element which is held in a first position and is anchored in the first position by means of a failure element, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak; wherein the failure element is longer in the direction in which the indicator element moves on failure of the failure element than it is in any other dimension as recited in independent claim 13 and any claims that depend therefrom. Therefore, Applicant believes the claims are in condition for allowance and respectfully requests allowance of the same.

The Examiner also states, in connection with claim 25, *Jones* does not disclose the length of the failure element in the direction in which the indicator elements moves on failure is at least 3 times, preferably at least 10 times, more preferably 20 times, and most preferably 50 times its size in any other dimension. The Applicant has cancelled

this claim from the application. Accordingly, the Applicant has not addressed this rejection.

With respect to claims 27-28, The Examiner states that *Jones* does not disclose an arrangement comprising a plurality of devices arranged over an area and arrange them substantially parallel. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to arrange a plurality of devices over an area and arrange them parallel in order for the user to be able to see the device and be able to compare them to one another equally, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. The applicant respectfully traverses the rejection.

As discussed above, *Jones* does not teach show or suggest a device for detecting the presence of a chemical leak, the device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak as recited in independent claim 1 and any claims that depend therefrom. In addition, the reference, neither alone nor in combination, teaches, shows or suggests a device for detecting the presence of a chemical leak, the device comprising a resilient indicator element which is held in a first position and is anchored in the first position by means of a failure element, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of th chemical leak; wherein the failure element is longer in the direction in which the indicator element moves on failure of the failure element than it is in any other dimension as recited in independent claim 13 and any claims that depend therefrom. Therefore, the Applicant believes the claims are in condition for allowance and respectfully requests allowance of the same.

CONCLUSION

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the method or process of the present invention. Having addressed all issues set out in the office action, applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed. The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

Respectfully submitted,

William B. Patterson
Registration No. 34,102
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd., Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)